Amendments to the Claims

1. (Currently Amended)   An apparatus to communicate a set of data symbols $d(i)$ where $i = 1,\ldots,n$, where n is a positive integer greater than one, the apparatus comprising:

a set of transmission lines $l(i)$ where $i = 1,\ldots,n$, where transmission line $l(i)$ propagates a signal $x(i)$ for $i = 1,\ldots,n$;

a set of receivers $r(i)$ where $i = 1,\ldots,n$, wherein receiver $r(i)$ is connected to transmission line $l(i)$ to receive the signal $x(i)$ for each $i = 1,\ldots,n$;

a set of drivers $t(i)$ where $i = 1,\ldots,n$, where driver $t(i)$ is connected to transmission line $l(i)$ to transmit the signal $x(i)$ for each $i = 1,\ldots,n$; and

a mapper to map the set of data symbols $d(i)$ to the signals $x(i)$ for $i = 1,\ldots,n$, wherein for each $i = 1,\ldots,n$, $x(i)$ is a function of $d(i)$ and at least one $d(j)$ for $j \neq i$; wherein for each $i = 1,\ldots,n$, receiver $r(i)$ provides an estimate of $d(i)$ based upon the signal $x(i)$ independently of $x(j)$ for $j \neq i$.

2. (Original)   The apparatus as set forth in claim 1, wherein the mapper comprises:

a table, wherein the table stores words addressed by the set of data symbols, wherein for each $i = 1,\ldots,n$, the driver $t(i)$ transmits the signal $x(i)$ in response to a word stored in the table.

3. (Original)   The apparatus as set forth in claim 1, wherein the mapper comprises:

a finite state machine, wherein the finite state machine in response the set of data

symbols provides words to the set of drivers, wherein for each $i = 1,...,n$ driver

$t(i)$ transmits the signal $x(i)$ in response to a word.

4. (Original)   The apparatus as set forth in claim 1, wherein the set of transmission lines

is such that transmission line $l(i)$ for an i has capacitive coupling with another

transmission line $l(j)$ where $j \neq i$.

5.-8. (Cancelled)

9. (Currently Amended)   A computer system comprising:

a set of transmission lines $l(i)$ where $i = 1,...,n$, where transmission line $l(i)$

propagates a signal $x(i)$ for $i = 1,...,n$, where n is a positive integer greater than one;

a first die comprising:

a set of drivers $t(i)$ where $i = 1,...,n$, where driver $t(i)$ is connected to

transmission line $l(i)$ to transmit the signal $x(i)$ for each $i = 1,...,n$;

a mapper to map a set of data symbols $d(i)$ to the signals $x(i)$ for

$i = 1,...,n$, wherein for each $i = 1,...,n$, $x(i)$ is a function of $d(i)$ and at least one $d(j)$

for $j \neq i$; and

a second die, the first die connected to the second die by the set of transmission

lines, the first die to communicate the set of data symbols $d(i)$ where $i = 1,...,n$ to the

second die, the second die comprising:

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a set of receivers $r(i)$ where $i = 1,...,n$, wherein receiver $r(i)$ is connected to transmission line $l(i)$ to receive the signal $x(i)$ for each $i = 1,...,n$; wherein for each $i = 1,...,n$, receiver $r(i)$ provides an estimate of $d(i)$ based upon the signal $x(i)$ independently of $x(j)$ for $j \neq i$.

10. (Original) The apparatus as set forth in claim 9, wherein the mapper comprises:

a table, wherein the table stores words addressed by the set of data symbols, wherein for each $i = 1,...,n$ driver $t(i)$ transmits the signal $x(i)$ in response to a word stored in the table.

11. (Original) The apparatus as set forth in claim 9, wherein the mapper comprises:

a finite state machine, wherein the finite state machine in response the set of data symbols provides words to the set of drivers, wherein for each $i = 1,...,n$ driver $t(i)$ transmits the signal $x(i)$ in response to a word.

12. (Original) The apparatus as set forth in claim 9, wherein the set of transmission lines is such that transmission line $l(i)$ for an i has capacitive coupling with another transmission line $l(j)$ where $j \neq i$.

13.-16. (Cancelled)

17. (Currently Amended)   A method to provide crosstalk equalization, the method comprising:

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mapping a set of data symbols $d(i)$, $i = 1,...,n$ to a set of signals $x(i)$,

$i = 1,...,n$, where n is a positive integer greater than one, wherein for each $i = 1,...,n$,

$x(i)$ is a function of $d(i)$ and at least one $d(j)$ for $j \neq i$; and

transmitting the set of signals on a set of transmission lines $l(i)$, $i = 1,...,n$,

where for each $i = 1,...,n$, $x(i)$ is transmitted on transmission line $l(i)$; and

receiving the set of signals by a set of receivers $r(i)$ where $i = 1,...,n$, wherein

for each $i = 1,...,n$, receiver $r(i)$ estimates the data symbol $d(i)$ based upon the signal

$x(i)$ independently of the signals $x(j)$ for $j \neq i$.

18.-21. (Cancelled)